

Sensitivity Analysis

A sensitivity analysis was conducted using a set of models with varied dynamic parameters; identical grid geometry and petrophysical properties were used, but four models were run to examine the effects of gas trapping and reactive transport within the reservoir. The four models included: 1) gas trapping with reactive transport, 2) gas trapping with no reactive transport, 3) no gas trapping with reactive transport, and 4) no gas trapping with no reactive transport. At year 12, the end of the injection period, CO₂ saturation with a 1% cutoff and pressure differential indicated no significant difference across the four models. The model that included both reactive transport chemistry and residual gas trapping was selected for use in this document as the model most representative of subsurface conditions and chemical interactions.